

Medical Research, investigations into clam and mussel poisoning have been carried on each year. It has been determined that these shellfish become toxic during the spring months, reaching a high state of toxicity during midsummer and becoming nontoxic during the winter months. There is a variation in the time at which the peak of toxicity is reached, but it generally occurs about the middle of July. The quarantine area covers the coastal district from Monterey County to the Klamath River in Del Norte County. Within this area the sale or offering for sale of clams and mussels is prohibited during the summer season, the quarantine each year terminating September 30.

While few cases were reported in 1930 and 1931, laboratory tests performed during both of these years showed a remarkable toxicity to animals. During the season of 1932, the concentration of poison injurious for consumption by human beings was determined for the first time with sufficient certainty. A discovery of the Hooper Foundation for Medical Research, however, proving the value of bicarbonate of soda in the prevention of mussel poisoning, promises to have a distinct effect in shortening the quarantine period to cover only the time when the highest toxicity prevails. It has been determined that the addition of one-quarter ounce of bicarbonate of soda to each quart of water in which shellfish are cooked destroys 85 per cent of the poison when the cooking process is continued for twenty to thirty minutes. This procedure does not grant complete protection, but it provides partial protection. The coagulating protein substances retain about 15 per cent of the poison in the tissue of the shellfish, which is only delivered by digestion in the stomach.

It would seem that if this method of cooking mussels becomes universal, quarantine measures may be restricted greatly. It has developed, also, that while clams may be just as toxic as mussels, fewer cases of poisoning occur in human beings who eat clams for the reason that the intestines of the clams are generally discarded. The clam being larger, the intestines can be removed more easily than in the smaller mussels. Since most of the poison is found in the intestines of the shellfish, it is obvious that clam poisoning for this reason is not of as frequent occurrence. As a result of these discoveries it becomes apparent that if mussels are properly cooked with bicarbonate of soda and if the intestines of clams are always removed and the remainder thoroughly cleaned, it is possible that the danger of shellfish poisoning on the Pacific Coast could be reduced greatly, if not entirely eliminated.

MEDICINAL LIQUOR—FEDERAL LEGISLATION

Liquor Bill Approved.—One of the major recommendations of the Wickersham Commission and the objective of a prolonged campaign by the medical profession became an actuality on March 30 when the House approved, 153 to 59, the Copeland-Celler bill removing restrictions from medicinal use of vinous and spirituous liquors.

The measure does not actually "lift the lid" on prescription of wines, whiskies, and other alcoholic beverages as medicinal remedies, and close governmental supervision will be continued to prevent abuses.

Drafting of new regulations for medicinal liquor has been started, but officials declined to state the nature of restrictions under consideration.

The effect of the measure is to remove present statutory limitations which prevent physicians prescribing more than one pint of liquor every ten days for a patient or to give more than one hundred prescriptions every three months.

Fearing that the new law will be misunderstood and its provisions abused, the American Medical Association, in expressing gratification over passage of the bill, disclosed its desire that "safeguards" be continued to prevent abuse of the greater freedom granted medical men.—Los Angeles *Times*.

Medicinal Liquor Law Signed by Roosevelt.—On March 30 President Roosevelt signed the Copeland-Celler medicinal liquor bill removing restrictions on the amount doctors may prescribe.

The bill accomplishes three main things—allows patients to obtain whatever liquor is medicinally necessary; insures patients secrecy concerning their ailments; and, by simplifying prescriptions, saves the government \$110,000 annually.

The only limitation upon doctors is that "no more liquor shall be prescribed to any person than is necessary to supply his medicinal needs."—Los Angeles *Herald-Express*.

Doctor's Dilemma Ended.—In removing the restrictions on the amount of liquor physicians may prescribe for medicinal purposes Congress not only cancels a long-standing insult to the medical profession, but absolves itself from the charge of practicing medicine without a license and without the necessary educational qualifications. No longer will it stand between the doctor and his patient and say what may and may not be done to save the patient's life. It was a false position in that it permitted congressmen to deny a sick man or woman what they did not think of denying themselves. Another bit of Volsteadian humbug has been abandoned.—Editorial in Los Angeles *Examiner*.

BOTULISM DANGER IN HOME-CANNED PRODUCTS

At this season of the year housewives are drawing heavily upon stocks of canned goods to supply the family table and, if home-canned vegetables that have not been packed properly are eaten, there is a grave danger of contracting botulism—a severe and often fatal disease. Recently six cases of this disease, all of which were probably due to the use of home-canned products, have been reported in California.

Unless the housewife uses a pressure cooker for canning vegetables in the home, she is not able to cook the products at a sufficiently high temperature and with sufficient heat penetration to sterilize the entire contents of the containers.

The organism that causes botulism occurs in the soil and it is extremely resistant. It belongs to a group of organisms which may thrive in the absence of light and air. Most common pathogenic organisms require opposite conditions for their growth, but the botulinus bacillus is not one of these. Powerful poisons are developed in the process of growth and if taken even in the most minute quantity they may cause death.

Strange to relate, improperly home-packed vegetables may show no signs of spoilage but nevertheless they may harbor this deadly poison. To be safe, vegetables canned by ordinary methods in the home should be thoroughly boiled after removal from the can, for at least thirty minutes before serving. This will generally destroy the poison, but it is safer to eat commercially packed products or those which have been cooked in a pressure cooker in the home.

Commercial canners of vegetable and meat products are required to heat such products at specified high temperatures and for required lengths of time under regulations enforced by the California Department of Public Health. Since the enforcement of these regulations began in 1925, no cases of botulism have occurred from the use of products packed commercially in California.

The whole matter of prevention in this case rests upon the application of high temperatures and with heat penetration to the entire contents of the can. Unfortunately, the housewife generally lacks the machinery necessary in this process and in her sincere efforts to conserve the family food supply fatal results not infrequently follow.